

ABSTRACT OF THE DISCLOSURE

The present invention relates to a method for illuminating an object with light (2) from a laser light source (3), preferably in a confocal scanning microscope (1). With the method according to the invention, it is possible to reduce the coherence length of the laser light, so that disruptive interference phenomena can be substantially eliminated. Should interference phenomena nevertheless be formed, these are to be influenced in such a way that they have no effect on the detection. The method according to the invention is characterized in that the phase angle of the light field is varied by a modulation means (4) in such a way that interference phenomena do not occur in the optical beam path, or occur only to an undetectable extent, within a predeterminable time interval.

(Fig.)